

## State Water Resources Control Board

Division of Drinking Water

March 7, 2017  
System No. 1502133

Mr. Brian Ball, Manager  
Treehouse California Almonds  
P. O. Box 12150  
Earlimart, CA 93219

RE: Citation No. 03\_12\_17C\_005  
Total Coliform Maximum Contaminant Level Violation  
For December 2016

Dear Mr. Ball:

Enclosed is a Citation issued to the Treehouse California Almonds (hereinafter "Water System") public water system.

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at (\$161.00) for the time spent on issuing this citation. California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the Water System for the current fiscal year.

If you have any questions regarding this matter, please contact Eli McFarland at (559) 447-7101 of my staff or me at (559) 447-3300.

Sincerely,



Tricia A. Wathen, P.E.  
Senior Sanitary Engineer, Visalia District  
SOUTHERN CALIFORNIA BRANCH  
DRINKING WATER FIELD OPERATIONS

TAW/LR

Enclosures

Certified Mail No. 7016 2070 0000 4896 3544

cc: Kern County Environmental Health Department

Mr. Mike Trotter, American Water Treating, 10912 Melocoton Court, Bakersfield, CA 93312

District 12: Via electronic mail no hard copy to Mr. Luis Garcia, U.S. EPA Region IX

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER

**Name of Public Water System:** Treehouse California Almonds

**Water System No:** 1502133

**Attention:** Mr. Brian Ball, Manager

P. O. Box 12150

Earlimart, CA 93219

**Issued:** March 7, 2017

CITATION FOR NONCOMPLIANCE  
TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION  
CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64426.1  
December 2016

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Board") to issue a citation to a public water system when the State Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

1 The State Board, acting by and through its Division of Drinking Water (hereinafter "Division")  
2 and the Deputy Director for the Division, hereby issues this citation pursuant to Section 116650  
3 of the CHSC to the Treehouse California Almonds (hereinafter "Water System") for violation of  
4 CHSC, Section 116555(a)(1) and California Code of Regulations (hereinafter "CCR"), Title 22,  
5 Section 64426.1.

6  
7 A copy of the applicable statutes and regulations are included in Appendix 1, which is attached  
8 hereto and incorporated by reference.

### 10 STATEMENT OF FACTS

11 The Water System is classified as a non-transient non-community water system with a  
12 population of approximately 43 persons, served through 3 service connections. The Water  
13 System is required to collect a minimum of one (1) distribution system bacteriological sample  
14 per month. The Division received laboratory results for one (1) bacteriological sample collected  
15 during December 2016 and seven (7) bacteriological samples collected during January 2017  
16 from the Water System. All samples were analyzed for the presence of total coliform bacteria.  
17 Two (2) of the eight (8) samples analyzed were positive for total coliform bacteria. None of the  
18 total coliform positive samples showed the presence of *Escherichia coli* (*E. coli*) bacteria. All  
19 water samples for coliform bacteria are summarized in Appendix 2 and 3.

20  
21 The Division has not received any documentation showing that public notification to the  
22 consumers of the water systems was conducted.

### 24 DETERMINATION

25 CCR, Title 22, Section 64426.1, Total Coliform Maximum Contaminant Level (MCL) states that  
26 a public water system is in violation of the total coliform MCL if it collects fewer than 40  
27 bacteriological samples per month and if more than one sample collected during any month is  
28 total coliform-positive.



1 The Water System took fewer than 40 bacteriological samples during December 2016, to  
2 include January 2017. The results of two (2) samples were total coliform positive. Therefore, the  
3 Division has determined that the Water System failed to comply with CCR, Title 22, Section  
4 64426.1 during December 2016.

5  
6 CCR, Title 22, Section 64424(d), Repeat Sampling states if a public water system for which  
7 fewer than five routine samples/month are collected has one or more total coliform-positive  
8 samples, the water supplier shall collect at least five routine samples the following month.

9  
10 The Water System was required to collect and report five (5) routine bacteriological samples  
11 during February 2017 following the total coliform-positive sample detected in the water supply  
12 during January 2017. The Water System failed to collect and report the required number of  
13 routine bacteriological analytical results to the Division because one of the routine sites had  
14 been removed from the water system. The water system needs to update their bacteriological  
15 sample siting plan (BSSP) accordingly and at any time there are changes to the water system.

## 16 17 DIRECTIVES

18 The Water System is hereby directed to take the following actions:

- 19  
20 1. Comply with CCR, Title 22, Section 64426.1, in all future monitoring periods.
- 21  
22 2. On or before **March 31, 2017**, notify all persons served by the Water System of the  
23 violation of Section 64426.1, in conformance with CCR, Title 22, Sections  
24 64463.4(b)&(c) and 64465. Copies of Sections 64463.4 and 64465 are included in  
25 Appendix 1. Appendix 4: Public Notification Template shall be used to fulfill this directive,  
26 unless otherwise approved by the Division.
- 27



3. Complete Appendix 5: Compliance Certification Form. Submit it together with a copy of the public notification to the Division on or before **April 10, 2017**.
4. Submit the information required by CCR, Title 22, Section 64426(b)(2) on or before **April 10, 2017**. Appendix 6: Positive Total Coliform Investigation may be used to fulfill this directive.
5. The Water System shall include this violation in the 2016 Consumer Confidence Report due to the Water System's customers by July 1, 2017 in accordance with CCR, Title 22, Section 64481(g)(1).
6. By **April 10, 2017** the Water System shall prepare and submit an updated Bacteriological Sample Siting Plan (BSSP) to the Division for review. The attached BSSP guidance document and form provided in Appendix 7 may be utilized for this purpose.

All submittals required by this Citation shall be electronically submitted to the Division at the following address. The subject line for all electronic submittals corresponding to this citation shall include the following information: Water System name and number, citation number and title of the document being submitted.

Tricia A. Wathen, P.E., Senior Sanitary Engineer  
State Water Resources Control Board  
Division of Drinking Water, Visalia District  
265 W. Bullard Ave, Suite 101  
Fresno, CA 93704  
Dwpdist12@waterboards.ca.gov

1 The State Board reserves the right to make such modifications to this Citation as it may deem  
2 necessary to protect public health and safety. Such modifications may be issued as  
3 amendments to this Citation and shall be effective upon issuance.

4  
5 Nothing in this Citation relieves the Water System of its obligation to meet the requirements of  
6 the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section  
7 116270), or any regulation, standard, permit or order issued or adopted thereunder.

8  
9 **PARTIES BOUND**

10 This Citation shall apply to and be binding upon the Water System, its owners, shareholders,  
11 officers, directors, agents, employees, contractors, successors, and assignees.

12  
13 **SEVERABILITY**

14 The directives of this Citation are severable, and the Water System shall comply with each and  
15 every provision thereof notwithstanding the effectiveness of any provision.

## FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Board. The State Board does not waive any further enforcement action by issuance of this Citation.



Tricia Wathen, P.E.  
Senior Sanitary Engineer, Visalia District  
DRINKING WATER FIELD OPERATIONS BRANCH



Date

## Appendices (7):

1. Applicable Statutes and Regulations
2. Summary of Distribution Bacteriological Samples
3. Summary of Source Bacteriological Samples
4. Notification Template
5. Compliance Certification Form
6. Positive Total Coliform Investigation Report Form
7. SWS BSSP updated for GWR 2010 Instr & Table



Certified Mail No. 7016 2070 0000 4896 3544



## **APPENDIX 1. Applicable Statutes and Regulations for Citation No. 03\_12\_17C\_005**

*NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.*

### **California Health and Safety Code (CHSC):**

#### **Section 116271 states in relevant part:**

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

- (1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
- (2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
- (3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
- (4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
- (5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
- (6) Chapter 7 (commencing with Section 116975).
- (7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
- (8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
- (9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
- (10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
- (11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
- (12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

- (k)
- (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
  - (2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

#### **Section 116555 states in relevant part:**

(a) Any person who owns a public water system shall ensure that the system does all of the following:

- (1) Complies with primary and secondary drinking water standards.
- (2) Will not be subject to backflow under normal operating conditions.
- (3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

**Section 116650 states in relevant part:**

- (a) If the state board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the state board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The state board may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation and shall be in addition to any liability or penalty imposed under any other law.

**California Code of Regulations, Title 22 (CCR):****Section 64421 (General Requirements) states:**

- (a) Each water supplier shall:
  - (1) Develop a routine sample siting plan as required in section 64422;
  - (2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
  - (3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in section 64423.1;
  - (4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in section 64426; and
  - (5) Comply with the Maximum Contaminant Level as required in section 64426.1.
- (b) Water suppliers shall perform additional bacteriological monitoring as follows:
  - (1) After construction or repair of wells;
  - (2) After main installation or repair;
  - (3) After construction, repair, or maintenance of storage facilities; and
  - (4) After any system pressure loss to less than five psi. Samples collected shall represent the water quality in the affected portions of the system.

**Section 64422 (Routine Sample Siting Plan) states:**

- (a) By September 1, 1992, each water supplier shall develop and submit to the State Board a siting plan for the routine collection of samples for total coliform analysis, subject to the following:
  - (1) The sample sites chosen shall be representative of water throughout the distribution system including all pressure zones, and areas supplied by each water source and distribution reservoir.
  - (2) The water supplier may rotate sampling among the sample sites if the total number of sites needed to comply with (a)(1) above exceeds the number of samples required according to Table 64423-A. The rotation plan shall be described in the sample siting plan.
- (b) If personnel other than certified operators will be performing field tests and/or collecting samples, the sample siting plan shall include a declaration that such personnel have been trained, pursuant to §64415 (b).
- (c) The supplier shall submit an updated plan to the State Board at least once every ten years and at any time the plan no longer ensures representative monitoring of the system.

**Section 64423 (Routine Sampling) states:**

- (a) Each water supplier shall collect routine bacteriological water samples as follows:
  - (1) The minimum number of samples for community water systems shall be based on the known population served or the total number of service connections, whichever results in the greater number of samples, as shown in Table 64423-A. A community water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency. The minimum reduced frequency shall not be less than one sample per quarter.
  - (2) The minimum number of samples for nontransient-noncommunity water systems shall be based on the known population served as shown in Table 64423-A during those months when the system is operating. A nontransient-noncommunity water system using groundwater which serves 25-1000 persons may request from the State Board a reduction in monitoring frequency if it has not violated the requirements in this article during the past twelve months. The minimum reduced frequency shall not be less than one sample per quarter.
  - (3) The minimum number of samples for transient-noncommunity water systems using groundwater and serving 1000 or fewer persons a month shall be one in each calendar quarter during which the system provides water to the public.
  - (4) The minimum number of samples for transient-noncommunity water systems using groundwater and serving more than 1000 persons during any month shall be based on the known population served as shown in Table 64423-A, except that the water supplier may request from the State Board a reduction in monitoring

for any month the system serves 1000 persons or fewer. The minimum reduced frequency shall not be less than one sample in each calendar quarter during which the system provides water to the public.

(5) The minimum number of samples for transient-noncommunity water systems using approved surface water shall be based on the population served as shown in Table 64423-A. A system using groundwater under the direct influence of surface water shall begin monitoring at this frequency by the end of the sixth month after the State Board has designated the source to be approved surface water.

(6) A public water system shall collect samples at regular time intervals throughout the month, except that a system using groundwater which serves 4,900 persons or fewer may collect all required samples on a single day if they are taken from different sites.

(b) In addition to the minimum sampling requirements, all water suppliers using approved surface water which do not practice treatment in compliance with Sections 64650 through 64666, shall collect a minimum of one sample before or at the first service connection each day during which the turbidity level of the water delivered to the system exceeds 1 NTU. The sample shall be collected within 24 hours of the exceedance and shall be analyzed for total coliforms. If the water supplier is unable to collect and/or analyze the sample within the 24-hour time period because of extenuating circumstances beyond its control, the supplier shall notify the State Board within the 24-hour time period and may request an extension. Sample results shall be included in determining compliance with the MCL for total coliforms in Section 64426.1.

(c) If any routine, repeat, or replacement sample is total coliform-positive, then the water supplier shall collect repeat samples in accordance with Section 64424 and comply with the reporting requirements specified in Sections 64426 and 64426.1.

**Table 64423-A**  
Minimum Number of Routine Total Coliform Samples

Monthly Population Served	Service Connections	Minimum Number of Samples
25 to 1000	15 to 400	1 per month
1,001 to 2,500	401 to 890	2 per month
2,501 to 3,300	891 to 1,180	3 per month
3,301 to 4,100	1,181 to 1,460	4 per month
4,101 to 4,900	1,461 to 1,750	5 per month
4,901 to 5,800	1,751 to 2,100	6 per month
5,801 to 6,700	2,101 to 2,400	7 per month
6,701 to 7,600	2,401 to 2,700	2 per week
7,601 to 12,900	2,701 to 4,600	3 per week
12,901 to 17,200	4,601 to 6,100	4 per week
17,201 to 21,500	6,101 to 7,700	5 per week
21,501 to 25,000	7,701 to 8,900	6 per week
25,001 to 33,000	8,901 to 11,800	8 per week
33,001 to 41,000	11,801 to 14,600	10 per week
41,001 to 50,000	14,601 to 17,900	12 per week
50,001 to 59,000	17,901 to 21,100	15 per week
59,001 to 70,000	21,101 to 25,000	18 per week
70,001 to 83,000	25,001 to 29,600	20 per week
83,001 to 96,000	29,601 to 34,300	23 per week
96,001 to 130,000	34,301 to 46,400	25 per week
130,001 to 220,000	46,401 to 78,600	30 per week
220,001 to 320,000	78,601 to 114,300	38 per week
320,001 to 450,000	114,301 to 160,700	50 per week
450,001 to 600,000	160,701 to 214,300	55 per week
600,001 to 780,000	214,301 to 278,600	60 per week
780,001 to 970,000	278,601 to 346,400	70 per week
970,001 to 1,230,000	346,401 to 439,300	75 per week
1,230,001 to 1,520,000	439,301 to 542,900	85 per week
1,520,001 to 1,850,000	542,901 to 660,700	90 per week
1,850,001 to 2,270,000	660,701 to 810,700	98 per week
2,270,001 to 3,020,000	810,701 to 1,078,600	105 per week
3,020,001 to 3,960,000	1,078,601 to 1,414,300	110 per week
3,960,001 or more	1,414,301 or more	120 per week

**Section 64423.1 (Sample Analysis and Reporting of Results) states:**

(a) The water supplier shall designate (label) each sample as routine, repeat, replacement, or "other" pursuant to Section 64421(b), and have each sample analyzed for total coliforms. The supplier also shall require the laboratory to analyze the same sample for fecal coliforms or *Escherichia coli* (*E. coli*) whenever the presence of total coliforms is indicated. As a minimum, the analytical results shall be reported in terms of the presence or absence of total or fecal coliforms, or *E. coli* in the sample, whichever is appropriate.



(b) The water supplier shall require the laboratory to notify the supplier within 24 hours, whenever the presence of total coliforms, fecal coliforms or E. coli is demonstrated in a sample or a sample is invalidated due to interference problems, pursuant to Section 64425(b), and shall ensure that a contact person is available to receive these analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any positive bacteriological results if the laboratory cannot make direct contact with the designated contact person within 24 hours.

(c) Analytical results of all required samples collected for a system in a calendar month shall be reported to the State Board not later than the tenth day of the following month, as follows:

(1) The water supplier shall submit a monthly summary of the bacteriological monitoring results to the State Board.

(2) For systems serving fewer than 10,000 service connections or 33,000 persons, the water supplier shall require the laboratory to submit copies of all required bacteriological monitoring results directly to the State Board.

(3) For systems serving more than 10,000 service connections, or 33,000 persons, the water supplier shall require the laboratory to submit copies of bacteriological monitoring results for all positive routine samples and all repeat samples directly to the State Board.

(d) Laboratory reports shall be retained by the water supplier for a period of at least five years and shall be made available to the State Board upon request.

**Section 64424 (Repeat Sampling) states in relevant part:**

(a) If a routine sample is total coliform-positive, the water supplier shall collect a repeat sample set as described in paragraph (1) within 24 hours of being notified of the positive result. The repeat samples shall all be collected within the same 24 hour time period. A single service connection system may request that the State Board allow the collection of the repeat sample set over a four-day period.

(1) For a water supplier that normally collects more than one routine sample a month, a repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.

(2) If the water supplier is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the water supplier shall notify the State Board within 24 hours. The State Board will then determine how much time the supplier will have to collect the repeat samples.

(b) When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection.

(c) If one or more samples in the repeat sample set is total coliform-positive, the water supplier shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The supplier shall repeat this process until either no coliforms are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms specified in Section 64426.1 has been exceeded and notifies the State Board.

(d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

(1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.

(2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with Section 64426.1.

**Section 64426.1 (Total Coliform Maximum Contaminant Level (MCL)) states in relevant part:**

(b) A public water system is in violation of the total coliform MCL when any of the following occurs:

(1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or

(2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or

(3) Any repeat sample is fecal coliform-positive or E. coli-positive; or

(4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.

(c) If a public water system is not in compliance with paragraphs (b)(1) through (4), during any month in which it supplies water to the public, the water supplier shall notify the State Board by the end of the business day on which

this is determined, unless the determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours of the determination. The water supplier shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraph (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of paragraph (b)(3) or (4), pursuant to section 64463.1.

**Section 64463.4 (Tier 2 Public Notice) states:**

(a) A water system shall give public notice pursuant to this section if any of the following occurs:

- (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
  - (A) Where a Tier 1 public notice is required under section 64463.1; or
  - (B) Where the State Board determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;
- (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;
- (3) Other violations of the monitoring and testing procedure requirements in this chapter, and chapters 15.5, 17 and 17.5, for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations; or
- (4) Failure to comply with the terms and conditions of any variance or exemption in place.

(b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the State Board's written approval based on the violation or occurrence having been resolved and the State Board's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:

- (1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;
- (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the State Board's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and
- (3) For turbidity violations pursuant to sections 64652.5(c)(2) and 64653(c), (d) and (f), as applicable, a water system shall consult with the State Board as soon as possible within 24 hours after the water system learns of the violation to determine whether a Tier 1 public notice is required. If consultation does not take place within 24 hours, the water system shall give Tier 1 public notice within 48 hours after learning of the violation.

(c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:

- (1) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, community water systems shall give public notice by:
  - (A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system; and
  - (B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):
    1. Publication in a local newspaper;
    2. Posting in conspicuous public places served by the water system, or on the Internet; or
    3. Delivery to community organizations.
- (2) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:
  - (A) Posting in conspicuous locations throughout the area served by the water system; and
  - (B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:
    1. Publication in a local newspaper or newsletter distributed to customers;
    2. E-mail message to employees or students;
    3. Posting on the Internet or intranet; or
    4. Direct delivery to each customer.

**Section 64465 (Public Notice Content and Format) states in relevant part:**

(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:

- (1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);
  - (2) The date(s) of the violation or occurrence;
  - (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;
  - (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;
  - (5) Whether alternative water supplies should be used;
  - (6) What actions consumers should take, including when they should seek medical help, if known;
  - (7) What the water system is doing to correct the violation or occurrence;
  - (8) When the water system expects to return to compliance or resolve the occurrence;
  - (9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;
  - (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail; and
  - (11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time." ...
- (c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements:
- (2) For a Tier 2 or Tier 3 public notice:
    - (A) The notice shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the public water system to obtain a translated copy of the notice or assistance in Spanish; and
    - (B) When a non-English speaking group other than Spanish-speaking exceeds 1,000 residents or 10 percent of the residents served by the public water system, the notice shall include:
      1. Information in the appropriate language(s) regarding the importance of the notice; or
      2. A telephone number or address where such residents may contact the public water system to obtain a translated copy of the notice or assistance in the appropriate language; and
  - (3) For a public water system subject to the Dymally-Alatorre Bilingual Services Act, Chapter 17.5, Division 7, of the Government Code (commencing with section 7290), meeting the requirements of this Article may not ensure compliance with the Dymally-Alatorre Bilingual Services Act.
- (d) Each public notice given pursuant to this article shall:
- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
  - (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
  - (3) Not contain language that minimizes or contradicts the information being given in the public notice.

#### Appendix 64465-A. Health Effects Language - Microbiological Contaminants.

Contaminant	Health Effects Language
Total Coliform	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform/E. coli	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Turbidity	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.



**Section 64469 (Reporting Requirements) states in relevant part:**

- (d) Within 10 days of giving initial or repeat public notice pursuant to Article 18 of this Chapter, except for notice given under section 64463.7(d), each water system shall submit a certification to the State Board that it has done so, along with a representative copy of each type of public notice given.

**Section 64481 (Content of the Consumer Confidence Report) states in relevant part:**

- (g) For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation.

- (1) Monitoring and reporting of compliance data.

# Bacteriological Distribution Monitoring Report

**1502133 Treehouse California Almonds**
**Distribution System Freq: 1/M**

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	Cl2	Cl2 Avg	Viol. Type	GWR Satisfied?	Comments
2/27/2017	4 samples	A	A			Routine	0-0.27				5th routine site has been removed by system. Will need to update their BSSP.
1/31/2017	THNC Admin Bldg. Kitchen	A	A			Routine	0.31				
1/31/2017	THNC Admin Bldg Men's Restroom	A	A			Routine	0.32				
1/29/2017	THNC HR Building	A	A			Routine	0.71				
1/3/2017	THNC HR Building	A	A			Routine					
1/3/2017	THNC Well	1.0	<1			Source Repeat					2nd TC+ for Dec2016 followup.
1/3/2017	THNC Admin Kitchen	A	A			Routine					
1/3/2017	THNC Kimberlina	A	A			Routine					
12/28/2016	HR Building	P	A			Routine			MCL		Repeats collected in January 2017. Sample from Well source repeat on 1/3/17 was also TC+/EC-.

## Violation Key

MCL	Exceeds Maximum Contaminant Level (L1 RTCR)
MR1	No monthly sample for the report month
MR2	No quarterly sample for the report quarter
MR3	Incorrect number of routine samples for the report month
MR4	Did not collect 5 routine samples for previous month's positive sample
MR5	Incorrect number of repeat samples as follow-up to a positive sample
MR6	No source sample
MR7	No summary report submitted
MR8	Other comments and/or info

GWR	Tier 1 or Tier 2 notification req'd
GR1	GWR M&R violation
L1	Level 1 Trigger RTCR (TCRMCL)
L2a	Level 2-EC+ Routine w/TC+Repeat
L2b	Level 2-TC+ Routine w/EC+ Repeat
L2c	Level 2-EC+ Routine w/No Repeats
L2d	Level 2-Repeat at GWR source monitoring is EC+
L2e	Level 2-Two (2) Level 1 Triggers in a 12-month period

# Source Bacteriological Monitoring Report

**1502133 Treehouse California Almonds**

<i>Sample Date</i>	<i>Time</i>	<i>Source</i>	<i>Sample Type</i>	<i>Test Method</i>	<i>T Coli</i>	<i>E Coli</i>	<i>F Coli</i>	<i>HPC</i>	<i>Violation</i>	<i>Comments</i>
1/29/2017	16:20	Well Tap	Well	P/A	A	A				
1/3/2017	15:27	Well	Well	MPN	1.0	<1				



## APPENDIX 4. NOTIFICATION TEMPLATE

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene informacion muy importante sobre su agua potable.

Por favor hable con alguien que lo pueda traducir.

**Treehouse California Almonds Has Levels of Coliform Bacteria  
Above the Drinking Water Standard**

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we did to correct this situation.

We routinely monitor for drinking water contaminants. We took \_\_\_\_\_[Total Number] samples to test for the presence of coliform bacteria during December 2016 and January 2017. \_\_\_\_\_[Number of Positive Samples Taken] of those samples showed the presence of total coliform bacteria. The standard is that no more than one (1) sample per month may test positive for coliform bacteria.

**What should I do?**

- **You do not need to boil your water or take other corrective actions.**
- This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. *Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*
- Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as *E. coli*, are present. **We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved.**

**What was done?**

[Describe corrective action.] \_\_\_\_\_ We anticipate resolving the problem within \_\_\_\_\_[estimated time frame].

For more information, please contact \_\_\_\_\_[insert name of contact] at \_\_\_\_\_[insert phone number] or at the following mailing address: \_\_\_\_\_[insert business/mailling address].

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.*

**Secondary Notification Requirements**

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- **SCHOOLS:** Must notify school employees, students, and parents (if the students are minors).
- **RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS** (including nursing homes and care facilities): Must notify tenants.
- **BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS:** Must notify employees of businesses located on the property.

This notice is being sent to you by Treehouse CA Almonds (1502133).

Date distributed: \_\_\_\_\_

## APPENDIX 5. COMPLIANCE CERTIFICATION

Citation Number: 03\_12\_17C\_005

Name of Water System: Treehouse California Almonds

System Number: 1502133

### Certification

I certify that the users of the water supplied by this water system were notified of the bacteriological violation of California Code of Regulations, Title 22, Section 64426.1 for the compliance period of December 2016 and the required actions listed below were completed.

Required Action	Date Completed
<i>(Citation Directive 2) Public Notification and Method(s) Used (circle): Mail / Hand delivered / Posting / Other (described):</i>	
<i>(Citation Directive 4) Complete and Submit Positive Total Coliform Investigation form</i>	
<i>(Citation Directive 6) Update BSSP by April 10, 2017 and submit to Division for review.</i>	

Signature of Water System Representative

Date

**Attach a copy of the public notice distributed to the water system's customers**

**THIS FORM MUST BE COMPLETED AND RETURNED TO THE STATE BOARD, DIVISION OF DRINKING WATER, NO LATER THAN April 10, 2017**

**Disclosure:** Be advised that the California Health and Safety Code, Sections 116725 and 116730 state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the Safe Drinking Water Act may be liable for, respectively, a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation or, for continuing violations, for each day that violation continues, or be punished by a fine of not more than \$25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.

# REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT Simple Systems with a Well and Storage/Pressure Tank and No Treatment

APPENDIX 6



This form is intended to assist public water systems in completing the investigation required by the federal revised Total Coliform Rule (rTCR) [effective April 1, 2016] and may be modified to take into account conditions unique to the water system. To avoid a violation, an assessment report must be completed and returned to your local regulatory agency no later than 30 days after the trigger date.

## ADMINISTRATIVE INFORMATION

Entity Name:	Name	System Address & Email	Telephone Number
PWSID NUMBER:	System Type:		
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Coliform Treatment Technique Trigger:			

## INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS (attach additional pages if needed)
1. Inspect each well head for physical defects and report					
a. Is raw water sample tap upstream from point of disinfection?					
b. Is wellhead vent pipe screened?					
c. Is wellhead seal watertight?					
d. Is well head located in pit or is any piping from the wellhead submerged?					
e. Does the ground surface slope towards well head?					
f. Is there evidence of standing water near the wellhead?					
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)					
h. Is the wellhead secured to prevent unauthorized access?					
i. How often do you take a raw water total coliform (TC) test?					
j. Provide the date and result of the last TC test at this location					

## STORAGE

	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					

# REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

## Simple Systems with a Well and Pressure Tank and No Treatment

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STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
5. Is the roof/cover of the tank sealed and free of any leaks?						
6. Is the tank above ground or buried?						
a. If buried or partially buried, are there provisions to direct surface water away from the site.						
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?						
7. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?						
8. What is the <b>measured</b> chlorine residual (total/free) of the water exiting the storage tank <b>today</b> ?						
9. What is the volume of the storage tank in gallons?						
10. Is the tank baffled?						
11. Prior to the TC+ or EC+, what was the previous date item #1-6 were checked and documented?						

PRESSURE TANK	TANK (name)	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. What is the volume of the pressure tank?						
2. What is the age of the pressure tank?						
3. Is the pressure tank bladder type or air compressor type?						
4. Did the pressure tank(s) deviate from normal operating pressure?						
5. Is the compressor pump running more often than normal?						
6. Is the tank bladder broken and the tank water logged?						
7. Is the tank(s) damaged, rusty, leaking, or has holes?						
8. Was there any recent work performed?						
9. Is the air relief vent (if there is one) on the pressure tank screened and facing downwards?						
10. Can the inside of the pressure tank be visually inspected thru an inspection port? If so, when was the last time it was inspected?						

DISTRIBUTION SYSTEM	SYSTEM RESPONSES				
1. What is the minimum pressure you are maintaining in the distribution system?					
2. Did pressure in the distribution system drop to less than 5 psi prior to experiencing the total coliform positive finding?					
3. Has the distribution system been worked on within the last week? (service taps, hydrant flushing, main breaks, main extensions, etc.) If yes, provide details.					



# REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

## Simple Systems with a Well and Pressure Tank and No Treatment

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DISTRIBUTION SYSTEM	SYSTEM RESPONSES			
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?				
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?				
6. If there was a mainline leak, when was it repaired?				
7. On what date was the distribution system last flushed?				
8. Is there a written flushing procedure you can provide for our review?				
9. Do you have an active cross connection control program?				
10. What is name and phone number of your Cross-Connection Control Program Coordinator?				
11. Have all backflow prevention devices in the distribution system been tested annually and repaired/replaced if they did not pass and retested afterwards?				
12. On what date was the last physical survey of the system done to identify cross-connections?				

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	4 <sup>th</sup> Repeat Sample (specify)
	1. What is the height of the sample tap above grade? (inches)			
2. Is the sample tap located in an exterior location or is it protected by an enclosure?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings, other contaminants or spray irrigation systems)				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)				
9. Is this sample tap designated on the bacteriological sample siting plan (BSSP) as a routine or repeat site?				
10. Were the samples delivered to the laboratory in a cooler and within the allowable holding time?				
11. What were the weather conditions at the time of the positive sample (rainy, windy, sunny)?				

# REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

## Simple Systems with a Well and Pressure Tank and No Treatment

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GENERAL OPERATIONS:		Response
1.	Has the sampler(s) who collected the samples received training on proper sampling techniques? If yes, please indicate date of last training.	
2.	Does the water system have a written sampling procedure and was it followed?	
3.	Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
4.	Were there any main breaks, water outages, or low pressure reported in the service area from which TC+ or EC+ samples were collected?	
5.	Does the system have backup power or elevated storage?	
6.	During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	
7.	What were the symptoms of illness if you received complaints about customers being sick?	

**SUMMARY: Based on the results of your assessment and any other available information, what deficiencies do you believe to have caused the positive total coliform sample(s) within your distribution system? (DO NOT LEAVE BLANK)**

Deficiency #	Deficiency Description
1.	
2.	
3.	
4.	
5.	

**CORRECTIVE ACTIONS: What actions have you taken to correct the above mentioned deficiencies? If additional time is needed to correct a deficiency, indicate the date that it will be corrected. (DO NOT LEAVE BLANK)**

Deficiency #	Corrective Action	Completion/Proposed Date
1.		
2.		
3.		
4.		
5.		

**REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM**  
**Simple Systems with a Well and Pressure Tank and No Treatment**

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**CERTIFICATION:** I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

**NAME:** \_\_\_\_\_ **TITLE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**Upon review of the Level 1 Assessment Form, the local regulatory agency may require submittal of the following additional information:**

- Sketch of system showing all sources, all treatment and chlorination locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
- A set of photographs of the source, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by the local regulatory agency.
- Name, certification level and certificate number of the Operator in Responsible Charge.
- Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.

## Division of Drinking Water Visalia District

### GUIDELINES FOR COMPLETING THE BACTERIOLOGICAL SAMPLE SITING PLAN FOR SMALL WATER SYSTEMS

The total coliform regulation requires the water supplier to submit a bacteriological sample siting plan to the Division of Drinking Water (Division), Visalia District Office for review and approval. The locations where samples are to be collected must be written down and formally approved by the Visalia District. These guidelines and Attachment 1, "Bacteriological Sample Siting Plan" Form, are to assist you in complying with these requirements.

To comply with the requirements for submitting a Bacteriological Sample Siting Plan, two (2) items must be submitted to the Visalia District at this time.

1. A system map, street map, or system schematic showing all sampling locations must be submitted. The map can be prepared by any system representative. It does not have to be prepared by an engineer. The following are also to be shown on the map:
  - Water Sources (i.e., well or spring)
  - Treatment Facilities (i.e., chlorination)
  - Storage Tanks
  - Pressure Reducing Stations
  - Booster Stations
  - Pressure Zones
  - Dead Ends
  - Service Area Boundaries
  - Routine Sample Sites
  - Repeat Sample Sites
  - Special Sample Sites
2. Complete Attachment 1, the "Bacteriological Sample Siting Plan" form, and **return the system map and form to the Visalia District for review and approval.**

Once the Bacteriological Sample Siting Plan has been approved by the Division, copies should be provided to the person responsible for sample collection, the laboratory and the person responsible for reporting coliform-positive samples to the Division.

#### Selection of Sampling Sites

The routine sampling sites chosen must be representative of the water distribution system including all pressure zones, areas supplied by each water source and distribution reservoir.

Looped Systems: If your entire water distribution system is looped, then one routine sample point may be representative of your system, assuming valves are open.

Pressure Zones: You should only be concerned about sampling in different pressure zones if your water system serves different areas of varying elevations, for example in mountainous areas.



***How many routine sampling sites are required?***

A minimum of five (5) routine sampling sites must be selected and indicated on your map and sampling plan form. If your water system is required to collect fewer than 5 routine samples a month, then 5 routine samples must be collected the month following any coliform positive sample. This is the reason for identifying 5 routine sites in your plan.

If the water system is not adequately represented by 5 routine sample locations, you may identify additional locations and collect more than one sample per month. Each site identified should be rotated for sampling at least every three months.

***How many repeat sampling sites are required?***

For systems that routinely **collects a minimum of one sample per month**, a repeat sample set consists of four samples (could be greater than four if more than one source is providing water to the distribution) to be collected from the following locations:

- One repeat sample from the same routine location.
- One repeat sample from an *upstream location* (within 5 connections of the routine site).
- One repeat sample from a *downstream location* (within 5 connections of the routine site).
- One repeat sample from the operating well or another location within the system that would best help to identify the source or area of contamination.

The following criteria should be considered when determining where to collect the fourth repeat sample:

- For systems with only one active well and do not provide continuous chlorination, the sample may be collected at the wellhead.
- For systems with more than one active well, it may not be possible to determine which well was serving the area where the positive routine sample was collected. For these systems, the fourth repeat sample should be collected at a storage tank or another point in the distribution system.
- For systems providing continuous chlorination, the system should be conducting raw-water bacteriological monitoring at a point ahead of chlorination on at least a monthly basis. These samples should be used to determine if the source of bacteriological contamination is from the well itself. For these systems, the fourth repeat sample should be collected at a storage tank or another point in the distribution system.
- Contact the Visalia District Office for assistance.

For systems collecting **more than one routine sample per month**, a repeat sample set consists of three samples from the following locations:

- One repeat sample from the same routine location.
- One repeat sample from an upstream location (within 5 connections of the routine site).
- One repeat sample from a downstream location (within 5 connections of the routine site).

**Note:** All active groundwater sources in operation at the time of the coliform-positive sample must also be sampled along with the repeat sample set.

***What if the water system does not have enough locations to select the required number of routine and repeat sample sites?***

If the water system does not have enough sample locations to identify 5 routine sites and 3 to 4 repeat sites per routine, you may either (1) identify fewer than 5 routine sites as long as the sampling adequately reflects water quality in the distribution system, or (2) use some of the routine sites as repeat sites for other routines (i.e., double up on use of available sites).

**Pointers for Sample Site Selection**

- When selecting a routine sample site you should be able to select a site upstream and a site downstream for repeat sampling.
- Select a site where the water is used continuously all year round.
- Pick a site that is easily accessible, i.e., a fenced yard with a locked gate and vicious dog is not a good selection.
- When choosing a sampling tap you should consider these factors:

The sampling tap should be located in as clean an environment as possible. It should be protected from contamination by humans, animals, airborne materials or other sources of contamination.

If you choose an outside private tap, it should be one that is in frequent use, clean, and at least 1½ feet (18 inches) above the ground. The sample tap should discharge downward.

If you choose an inside tap, be sure that you are not sampling from drinking fountains; taps that have aerators or strainers, or swivel faucets; or taps off of individual homeowner treatment units.

Do not choose a fire hydrant as sampling tap.

Avoid taps that are surrounded by excessive foliage or taps that are dirty or corroded.

Avoid taps that leak, have fittings with packing, or have permanent hoses or attachments fastened to the tap (Never collect a sample from a hose).

Avoid the use of dead ends for routine sample collection, and use them for repeat samples only if no other sample sites are available and if there is continuous water use from a service off the dead-end.

**Instructions for Completing the  
Bacteriological Sample Siting Plan Form**

This form has been designed to include all the requirements for the Bacteriological Sample Siting Plan.

- **Public Water System Classification**

The public water system (PWS) classification for your water system is either community, nontransient noncommunity or transient noncommunity. This classification determines the type and frequency of all water quality testing. If you are uncertain of your classification, contact the Visalia District.

- **Month/Daily Users**

The monthly population determines the frequency of bacteriological sample collection for community water systems. The daily population determines the frequency of sample collection for transient and nontransient noncommunity systems.

- **Active Service Connections (Community water systems only)**

This is the number of active hook-ups served by the system. If your system has a hook-up to a vacant lot, do not count this as an active connection. If a vacant lot has a right to a future connection, do not count this as an active connection. If a residence is connected to the system, but the residence is vacant, count this as an active hook-up.

- **Sampling Frequency**

This is the minimum number of routine bacteriological samples required at the frequency specified. If any routine sample is positive for coliform bacteria, additional repeat samples will be required. Repeat samples are in addition to the required routine samples. If you are uncertain of the routine sampling frequency for your water system, contact the Visalia District.

A coliform-positive sample will increase the routine monitoring for a small system the following month. A system normally collecting less than 5 routine samples per month, which has a coliform positive sample, must collect a minimum of five (5) routine samples the following month.

- **Trained Sampler**

The person collecting samples must be trained.

Sampling Service: Water systems utilizing a certified laboratory or other sampling service for water sample collection will be considered to have trained samplers. Enter the name of the laboratory or sampling service collecting your samples. A copy of the approved Bacteriological Sample Siting Plan should be provided to the laboratory or sampling service, if one is used.

Other Trained Samplers: Any person receiving a certificate from AWWA for attendance of the Water Sampling Training should submit a copy of their certificate along with the completed form. Any other samplers should submit a statement of their experience and training to this office for approval.

- **Analyzing Lab**

Enter the state-certified laboratory, which will be analyzing your water samples.

- **Person Responsible to Report Coliform-Positive Samples to Division**

This should be the person that the laboratory is required to contact when a sample is total or fecal coliform positive. This person must notify the Division within 24 hours of a violation of the total coliform standard (more than one positive sample in a month) or when any sample is fecal or *E. coli* positive. This person should have the authority to take corrective action as required by regulation and the Division. This should be the same person listed on your Emergency Notification Plan.

- **Day/Evening Phone Number**

The Division requires that the water system provide the phone numbers of the person listed above so that they can be contacted by the laboratory or the Division at any time during the day or evening in the event of a bacteriological emergency.

- **Signature and Date**

The person preparing the Sample Siting Plan should sign and date the plan. If the Division has questions regarding the sampling plan, this is the person to be contacted.

- **Sample ID**

This should be entered on the laboratory slip when the sample is turned into the laboratory. This is the unique identifier for the water sample location or the location address may also be used. For systems, which have no more than five (5) routine locations, these routine sites will be 1-ROU, 2-ROU, 3-ROU, 4-ROU, and 5-ROU.

For systems collecting one or fewer routine samples per month, a minimum of five (5) routine sampling sites with three (3) repeat sampling sites for each routine sample locations must be listed.

For systems collecting more than one routine sample per month, a minimum of five (5) routine sampling sites with two (2) repeat sampling sites for each routine sample location must be listed. Repeat sample sites are to be located within five (5) service connections upstream and downstream of the routine sample site.

All sample locations should be marked in some way with the Sample ID or location address, i.e., the code painted on the sampling location or tagged with a water proof tag so the person collecting the water sample is sure to collect the water from the correct sample locations.

- **Sample Type**

This describes what type of sample (routine or repeat) is to be collected at this location.

- **Sample Point**

This is the type of the sample location. Use the following abbreviations, when appropriate.

HB	Hose Bib (exterior)
SF	Sink Faucet
PC	Goose Neck Type Copper Tube with Pet Cock

- **Location of Sample Point**

This is the description of the area in the distribution that the sample site is located. Routine sample sites shall not be located at dead ends.

DE	Dead End (Not Recommended)
PZ	Pressure Zone
RD	Representative Distribution

- **Location Address**

This is the actual physical location where the water sample is to be collected. If possible use a street address, i.e., 103 Good Street. If the location does not have a street address, use the nearest crossroads or use the last name of the resident, i.e., "Brown Residence." If the location is a business, please list the business name and address.

When describing the location, keep in mind that the person collecting water samples must be able to locate the sample site from your description.

- **Months Sample Collected at This Location**

This is the schedule for routine samples to be collected. For example, suppose two (2) sites are representative of your systems. Site No. 1 will be sampled in January, March, May, July, September, and November. Site No. 2 will be sampled in February, April, June, August, October, and December. All routine sites identified should be rotated to allow sampling at least every 3 months.



# BACTERIOLOGICAL SAMPLE SITING PLAN FOR SMALL WATER SYSTEMS

<b>System No.:</b>		<b>System Name:</b>			
<b>PWS Classification:</b>		<b>No. Monthly Users:</b> Daily Users:		<b>List all Active Sources that may need to be sampled for each Total Coliform Positive:</b>	
<b>No. Active Service Connections:</b>		<b>Sampling Frequency:</b>			
<b>Name of Trained Sampler:</b>		<b>Analyzing Lab:</b>			
<b>Person responsible to report coliform-positive samples to the Division:</b>				<b>Day/Evening Phone No.:</b>	
<b>Signature of Water System Representative:</b>					
<b>Date:</b>					
Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine				
1-REP1	Repeat				Repeat Sample Only
1-REP2	Repeat				Repeat Sample Only
1-REP3 *	Repeat				Repeat Sample Only
2-ROU	Routine				
2-REP1	Repeat				Repeat Sample Only
2-REP2	Repeat				Repeat Sample Only
2-REP3 *	Repeat				Repeat Sample Only
3-ROU	Routine				
3-REP1	Repeat				Repeat Sample Only
3-REP2	Repeat				Repeat Sample Only
3-REP3 *	Repeat				Repeat Sample Only
4-ROU	Routine				
4-REP1	Repeat				Repeat Sample Only
4-REP2	Repeat				Repeat Sample Only
4-REP3 *	Repeat				Repeat Sample Only
5-ROU	Routine				
5-REP1	Repeat				Repeat Sample Only
5-REP2	Repeat				Repeat Sample Only
5-REP3 *	Repeat				Repeat Sample Only
<b>If the water system has one or more total coliform-positive samples, at least five routine samples will be collected the following month.</b>					
<b>If chlorine is being used, is it used on a continuous basis? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, raw water samples must be taken. Frequency is monthly.</b>					
<b>* May be a source sample to satisfy the triggered source monitoring requirement under the Ground Water Rule (if more than one source; designate all sources to be sampled). Please be aware that this designation will count towards compliance with the total coliform MCL (maximum contaminant level).</b>					